

Title (en)
A CRYPTOGRAPHIC METHOD

Title (de)
VERSCHLÜSSELUNGSVERFAHREN

Title (fr)
PROCEDE CRYPTOGRAPHIQUE

Publication
EP 0704124 A4 19990324 (EN)

Application
EP 94902556 A 19931220

Priority
• AU 9300665 W 19931220
• AU PL650292 A 19921222

Abstract (en)
[origin: WO9415423A1] A cryptographic method including selecting secret keys p and q , being prime numbers greater than 3, selecting public parameters for a series of data values which belong to one of a plurality of pairs of groups whereby any one of the data values in one of the pairs of groups is recovered by performing an operation $kN_i + 1$ times modulo n beginning with any one of the data values, where k is an integer, N_i is the order of the i -th pair of groups and $n = p \cdot q$, selecting a public encryption key e which is a factor of $kN_i + 1$ for all i , and processing communications data as a member of one of the pairs of groups by performing the operation on the communications data, whereby the order N_i of the pair of groups i that the communications data belongs to can be determined on the basis of p and q , and a secret decryption key d_i can be determined using $e \cdot d_i = kN_i + 1$.

IPC 1-7
H04L 9/26

IPC 8 full level
G09C 1/00 (2006.01); **G06F 7/72** (2006.01); **H04L 9/26** (2006.01); **H04L 9/30** (2006.01); **H04L 9/32** (2006.01)

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G06F 7/725 (2013.01 - EP US); **H04L 9/302** (2013.01 - EP US); **H04L 9/3066** (2013.01 - EP US); **H04L 9/3247** (2013.01 - EP US)

Citation (search report)
• [XA] EP 0503119 A1 19920916 - OMNISEC AG [CH]
• [A] KENJI KOYAMA ET AL: "ELLIPTIC CURVE CRYPTOSYSTEMS AND THEIR APPLICATIONS", IEICE TRANSACTIONS ON INFORMATION AND SYSTEMS, vol. E75 - D, no. 1, 1 January 1992 (1992-01-01), pages 50 - 57, XP000301174
• See references of WO 9415423A1

Designated contracting state (EPC)
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WO 9415423 A1 19940707; AU 5689594 A 19940719; AU 677269 B2 19970417; CA 2150683 A1 19940707; CA 2150683 C 19990907; EP 0704124 A1 19960403; EP 0704124 A4 19990324; JP H08504962 A 19960528; US 5627893 A 19970506

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